

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	10/560, 323	Confirmation No. 4966
Applicant (s)	:	Jeffrey J. Wooster, et al.	
Filed	:	December 9, 2005	
TC/A.U.	:	1796	
Examiner	:	Nathan M. Nutter	
Title	:	FILM LAYERS MADE FROM ETHYLENE POLYMER BLENDS	
Docket No.	:	63012A	
Customer No.	:	00109	

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE

Responsive to the Official Action dated September 25, 2008, applicants request reconsideration and withdrawal of the rejections based on the following comments.

Claims 1,2, 6-8, 13 and 19 are currently pending in the above-identified application.

The Examiner has initially made rejections based on the grounds of nonstatutory obviousness-type double patenting over copending application 10/541,832 (a provisional rejection) and US Patent 6,723,398. These references will be distinguished in relation to the rejections based on 35 USC § 102, below. As the present claims are separately patentable over this art, the double patenting rejections appear to be improper. Accordingly, no terminal disclaimer is necessary.

The Examiner has rejected claims 1, 3, 6-8, 13 and 19 under 35 USC § 102 (b) or 102(e) as being anticipated by several references. Claims 3, 6-8, 13 and 19 all depend from Claim 1. As recited in claim 1, the present invention requires (among other things) at least 10 percent of a homogeneously branched polyethylene and at least 5 percent of a heterogeneously branched polyethylene, where the melt index for the overall polymer composition is lower than the melt index for the homogeneously branched component. The comparison in Table 3 between Example 1 and comparative Example 2 demonstrates the improved properties which results from using the materials of the present invention, particularly in regards to haze and Elmendorf tear strength. None of the art cited by the

Examiner teaches this aspect of the claims, and so it is respectfully requested that each of these rejections be reconsidered and withdrawn.

Specifically, Falla (US 5,360,648), has no mention of selecting the components to ensure that the overall melt index is less than that of the homogeneously branched component. In fact, the film layers of Falla can comprise 100% of the homogeneously branched component. Moreover, even when additional components are present, it is suggested that they have a melt index of 0.1 to 10 g/10min for heterogeneously branched materials or high pressure low density polyethylene, or 0.2 to 10 g/10 min for ethylene-vinyl acetate (See col 9, lines 18-24). If anything, this is slightly higher than the range given for the homogeneously branched part, i.e. 0.01 to 10 g/10 min (see column 6, lines 42-43). Additionally it should be noted that the examples contained no blends at all, let alone blends of homogeneous LLDPE with heterogeneous LLPDE.

Similarly, Bosiers (US 5,874,139) has no teaching that the overall mixture has a melt index which is less than the melt index of the homogeneously branched substantially linear portion. In fact the preferred range given for Bosier's homogeneously branched component is 0.14 g/10 min to 0.67 g/10 min (see col. 4, line 43) whereas the preferred range given for Bosier's heterogeneously branched component is 1 g/10 min to 5 g/10 min (see col. 4, line 66). As it is preferred not to have other components in Bosier, it is clear that the overall melt index would be higher than that for the homogeneously branched component.

Likewise, Kapur (US 2006/0046048) is also silent as to selecting the components such that the overall melt index of the blends is less than the melt index of the homogeneously branched portion. Kapur teaches a melt index range for the homogeneous portion of from 0.2 to 200 g/10 min (see paragraph [0063]), and a melt index for the heterogeneously branched portion of from 0.01 to 50 g/10 minutes. While it may be possible to pick and choose from these ranges such that a blend falling within the present claims is obtained, Kapur gives no incentive to do so, and in fact, the only Example uses a heterogeneous component with a higher melt index than the homogeneous component (see paragraph [0117]).

Parikh (US 6,566,446) relates to blends of two homogeneously branched compounds, thus fails to teach component (B) in claim 1 at all, let alone making any

suggestion that such component should be selected so as to ensure that the overall melt index is lower than the melt index for the homogeneously branched portion.

Finally, Chum (US 6,723,398) also fails to provide any motivation to select heterogeneously branched components such that the overall blend has a melt index lower than the homogeneously branched component. In fact while Chum does not require any heterogeneously branched component, at all, Chum specifically states that it is preferred that “the first interpolymer is a homogeneously branched ethylene interpolymer having an I₂ melt index equal to or lower than that of the second interpolymer which would be a heterogeneously branched ethylene interpolymer” (see column 8, lines 21-25). Therefore Chum teaches away from the recitations in the present claims.

Accordingly, as none of the references teaches or suggests all of the recitations in claim 1, it is respectfully requested that each of the rejections be withdrawn.

Respectfully submitted,

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